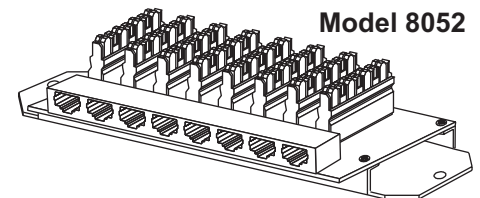
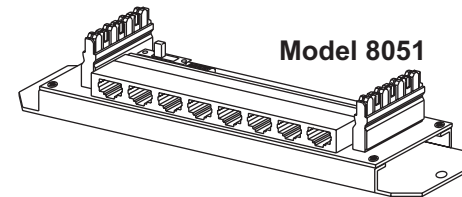
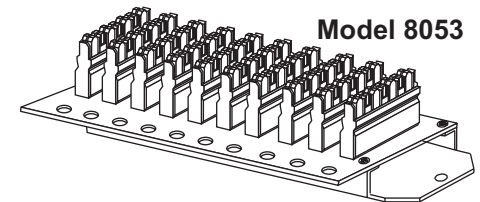


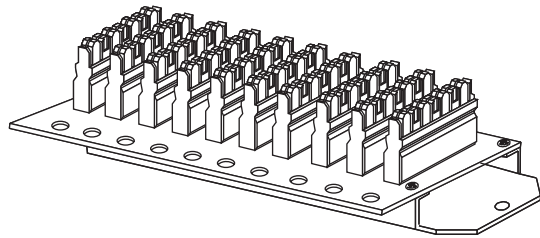
Channel **PLUS**®

Integrated Home Networks

8050 Series Telephone/Data Hubs Instruction Manual & Structured Wiring Guide

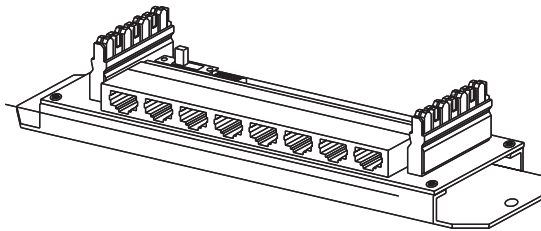


 **multiplex**®
technology, inc. 



Model 8053

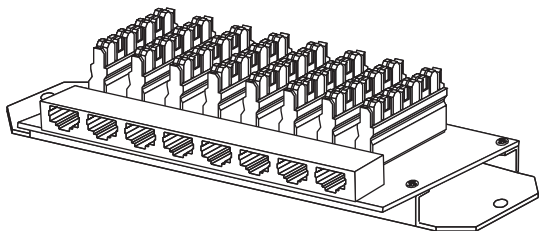
Use a model 8053 to distribute telephone service. A single model 8053 can handle up to 9 telephones. For more phones, add one 8053 for every 8 telephones. All connectors are bridged (wired in parallel.)



Model 8051

Use a model 8051 to distribute telephone service if you prefer to use modular connectors. The model 8051 also provides loopthrough on pair 1 for a security system or a DoorTel front door intercom. All connectors are bridged (wired in parallel.)

In a structured wiring system, a model 8051 is used to provide selective telephone service. (See the section on Structured Wiring Systems.)

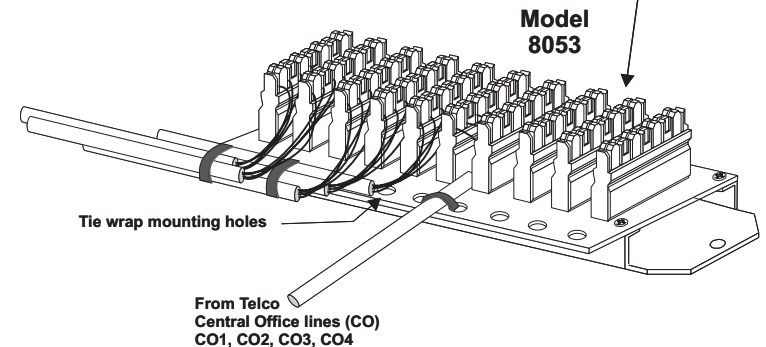
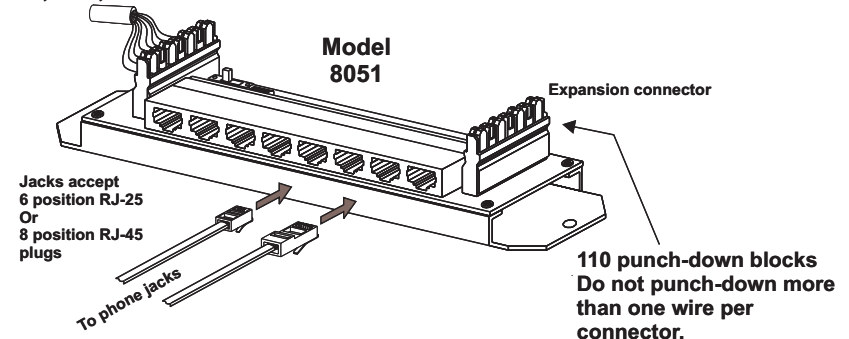


Model 8052

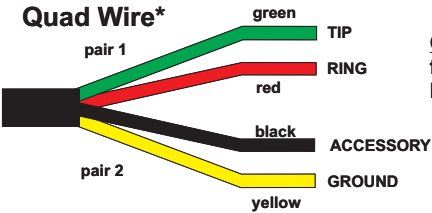
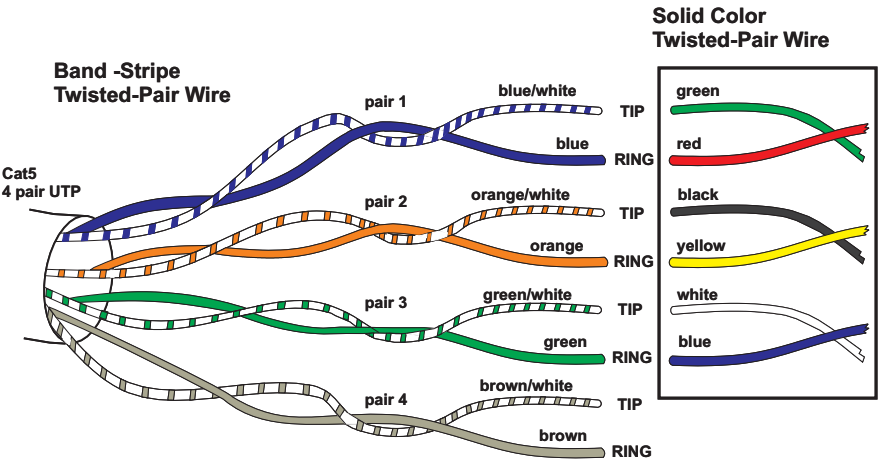
In a structured wiring system, a model 8052 is used to provide a termination point for all internal house wiring. (See the section on Structured Wiring Systems.) Each modular connector is individually connected to the 110 punch-down block behind it.

To distribute POTS, use either an 8051 or an 8053. All connectors are bridged (wired in parallel.)

From Telco
Central Office lines (CO)
CO1, CO2, CO3, CO4



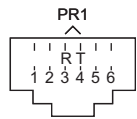
Wire Color Codes



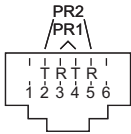
CAUTION: Quad wire is no longer acceptable for installations in multi-line environments. Retrofit with UTP if possible.

Modular connector designations

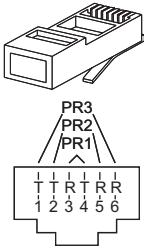
6 position connectors



RJ-11
Single line telephones, answering machines

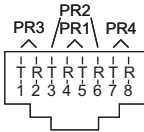


RJ-14
Dual line telephones & answering machines



RJ-25
Rare
3 line KSU hookups

8 position connectors

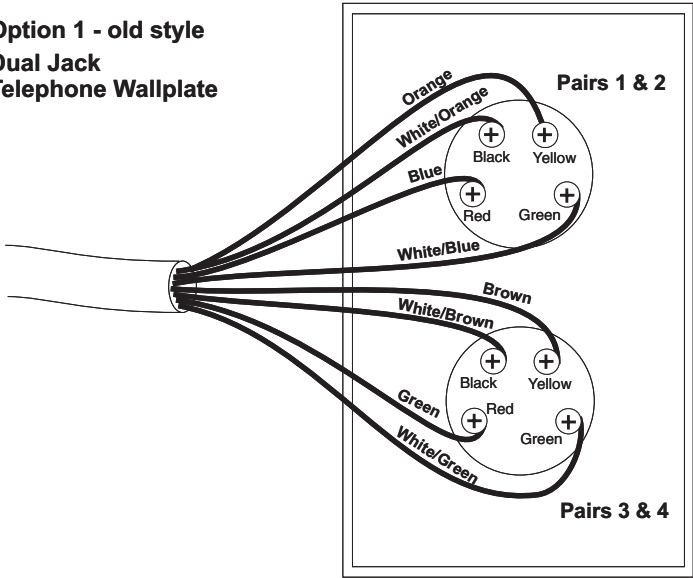


RJ-45 (wired to TIA T568A standard)
Ethernet (both 10BaseT and 100BaseT)
Structured wiring of phones and data lines

(There are other wiring standards. For residential use, we recommend that RJ-45 jacks are wired to the T568A standard.)

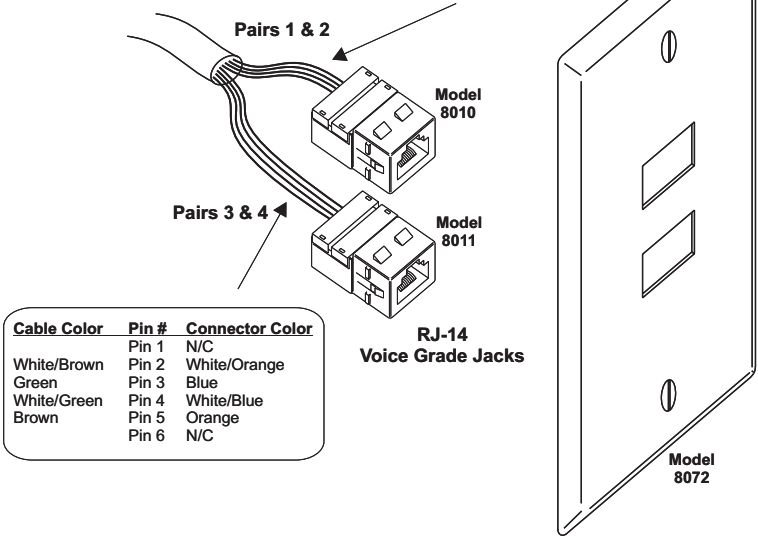
Telephone Termination

Option 1 - old style
Dual Jack
Telephone Wallplate



Option 2 - new style
Quickport wallplate

Cable Color	Pin #	Connector Color
White/Orange	Pin 1	N/C
Blue	Pin 2	White/Orange
White/Blue	Pin 3	Blue
Orange	Pin 4	White/Blue
	Pin 5	Orange
	Pin 6	N/C



Cable Color	Pin #	Connector Color
White/Brown	Pin 1	N/C
Green	Pin 2	White/Orange
White/Green	Pin 3	Blue
Brown	Pin 4	White/Blue
	Pin 5	Orange
	Pin 6	N/C

How to wire a new house

The Internet, multiple phone lines, cable television, satellite systems, and high speed data links are bringing more and more information to your home. The communication wiring in most houses is overwhelmed by these requirements. It doesn't have to be that way. During construction, providing modern cabling is surprisingly inexpensive.

When wiring a new house:

- 1) Establish a distribution point for all data, telephone and coax cables.
- 2) When possible, have a network enclosure at this location.
- 3) Run cables from each wall outlet back to the network enclosure. This is called 'home run' or 'star' wiring.
- 4) When in doubt, add the extra wires. When a house is being built, running extra cables is easy. Once the wall board is up, that extra cable will cost 10 times as much.

Determine the wiring scheme that is right for you:

Standard:

- 1 Cat-5 cable to all possible telephone and computer modem locations.
- 1 RG-6 coax to all possible TV locations (except the media niche).
- 3 RG-6 coax cables to the media niche (to satellite receiver, to TV, from modulator).
- 2 Cat-5 cables to telephone company entry location.
- 1 RG-6 coax cable to CATV entry point (2 if you have a dual coax cable.)
- 2 RG-6 coax cables to location of satellite dish.

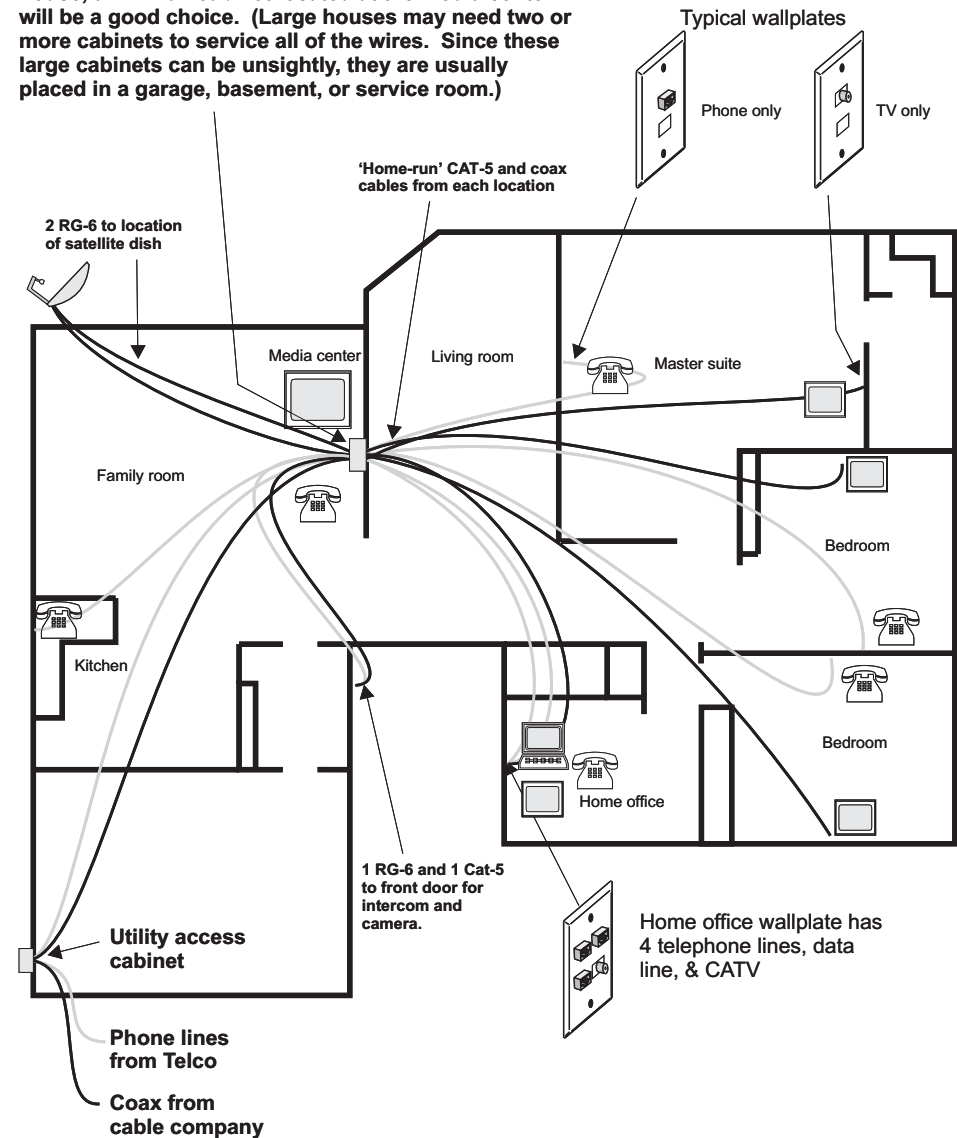
Options ... to the above, add any or all of the following:

- 1 Cat-5 cable to all computer or printer locations for a home network.
- 2nd RG-6 coax to all TV locations for modulator inputs or satellite feed.
- 1 RG-6 coax + 1 Cat-5 cable to front door for CCTV camera and DoorTel intercom.
- 1 RG-6 coax and bell wire to any other possible CCTV camera locations (swimming pool, side yard, driveway.)

The ultimate ... where cost is no object, solution:

Conduit to all locations. Remember to install pull cords in conduit.

Run all wires to a network enclosure. In a typical house, an in-wall cabinet located at the media center will be a good choice. (Large houses may need two or more cabinets to service all of the wires. Since these large cabinets can be unsightly, they are usually placed in a garage, basement, or service room.)



Wallplates

- 8072 - 2 holes
- 8074 - 4 holes
- 8078 - 8 holes, dbl gang
- 8060 - 2 holes Decora



Jacks

- 8010 - 6 conductor RJ-25 white
- 8011 - 6 conductor RJ-25 gray
- 8013 - 8 conductor RJ-45 blue
- 8030 - F connector white
- 8031 - F connector gray
- 8040 - blank white

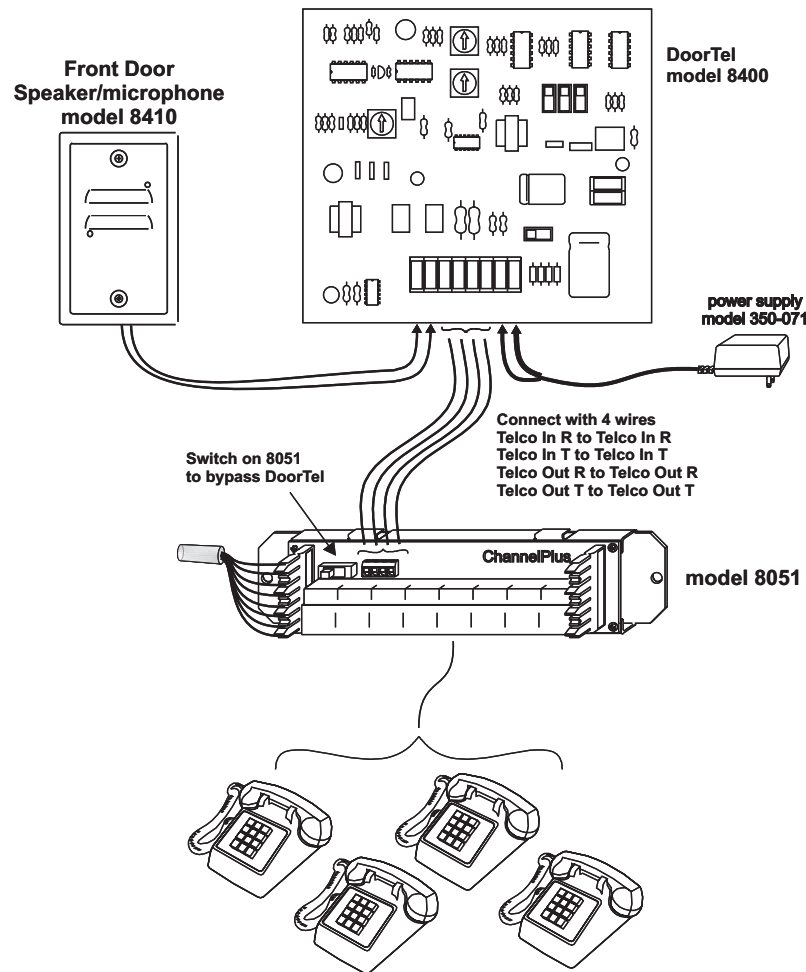


Consult the ChannelPlus dealer catalog for other wallplate and connector options.

Structured wiring basics:

Phones today, data or KSU tomorrow

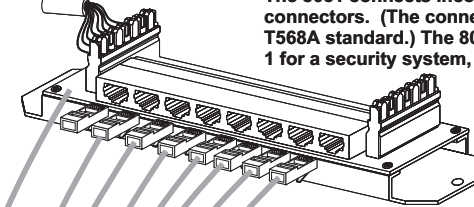
The DoorTel system allows you to answer your front door from any telephone in the house. When the doorbell rings, pick up the nearest extension and press '#'. Now you may have a two-way conversation with the person ringing the bell.



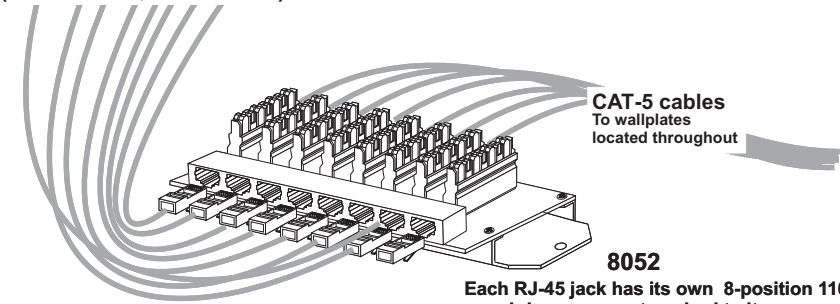
From Telco
Center Office lines (CO)
CO1 - CO4

8051

The 8051 connects incoming telco wires to 8 RJ-45 connectors. (The connectors are wired to the TIA T568A standard.) The 8051 has a loop-through on pair 1 for a security system, or DoorTel front door intercom.



Standard Cat-5 jumper cables
(8091 - 1 foot, 8092 - 2 foot)

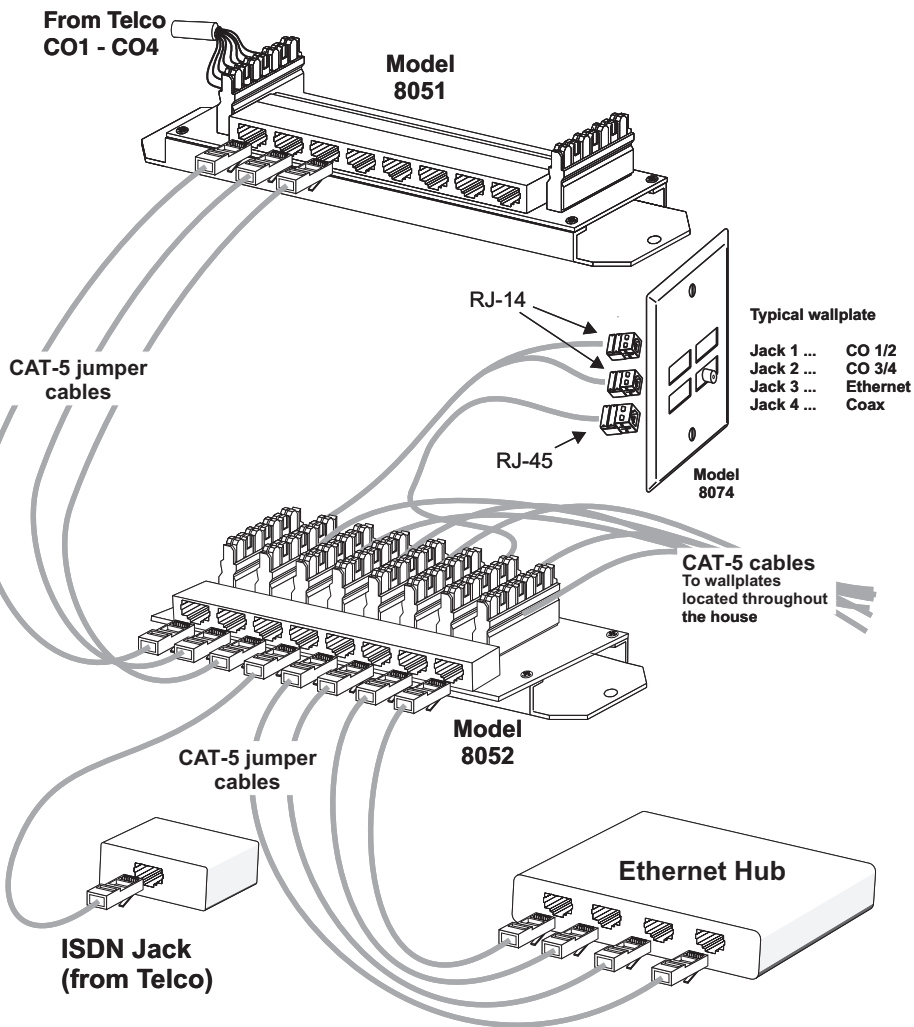


The most versatile phone/data systems use structured wiring concepts. The phone/data jacks located throughout the house are each connected to a unique jack on a model 8052 hub. Jumper cables are then used to connect phone, data, or a KSU port to that jack.

In this basic system, ordinary telephone service is provided to eight jacks in a house. (To expand, just add another 8051 and 8052 for every eight jacks.)

Structured wiring basics:

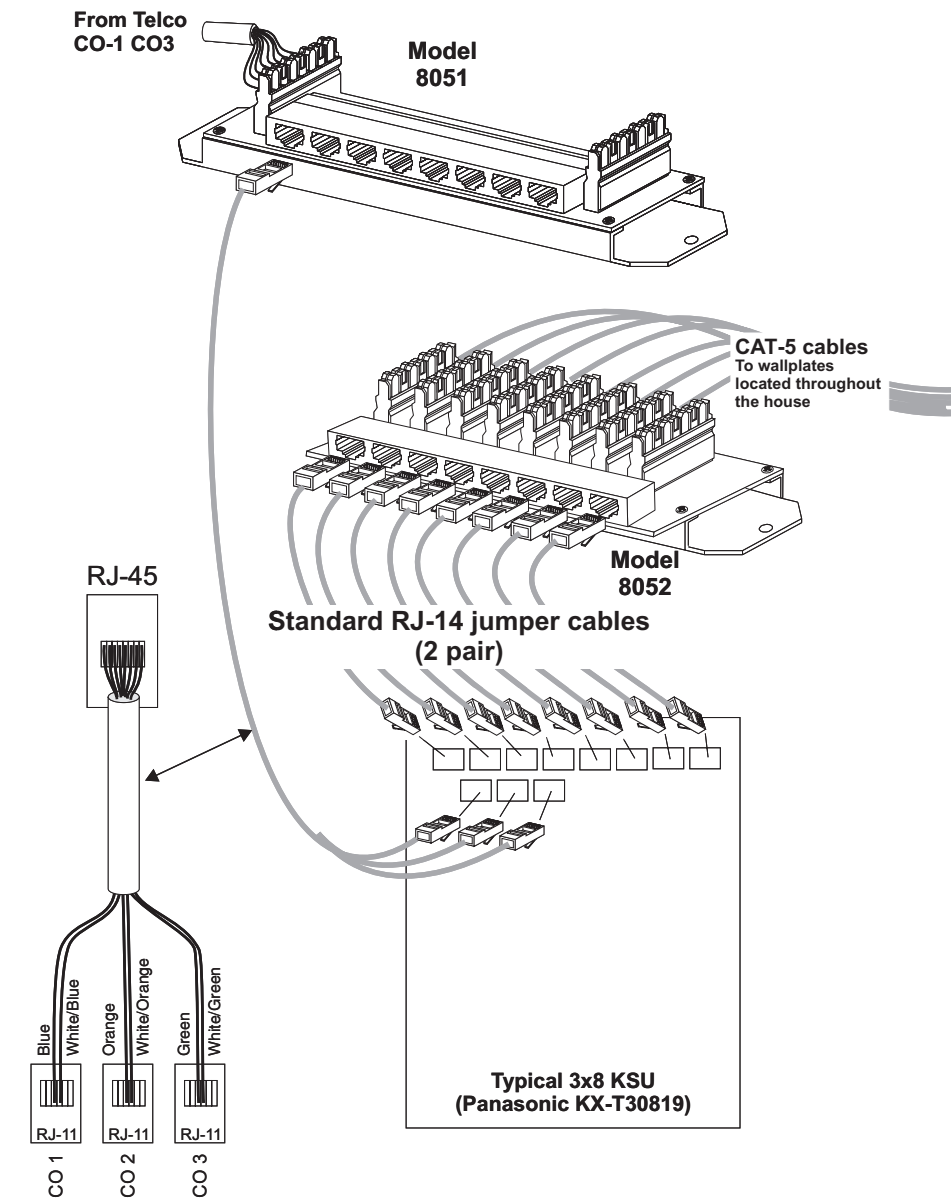
Changing some jacks to data distribution



In this example, the house has plain old telephone service (POTS) on 3 jacks, ISDN service on another, and an Ethernet network on four other jacks. Jacks can be located throughout the house. Changing from one type of service to another is as simple as moving a jumper cable.

Structured wiring basics:

Connecting to a KSU

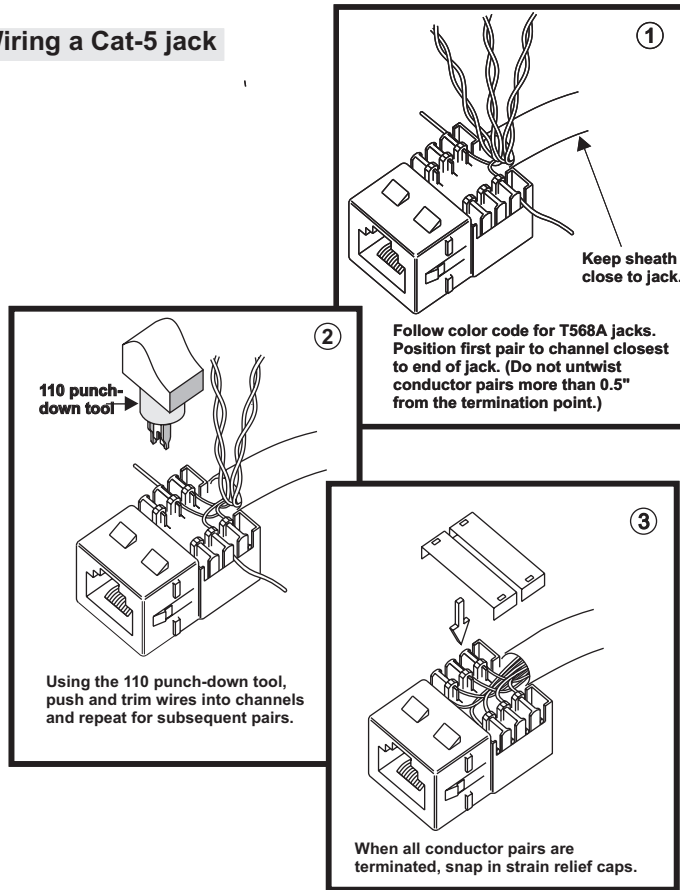


Create this custom cable by cutting off one end of a standard Cat-5 jumper.

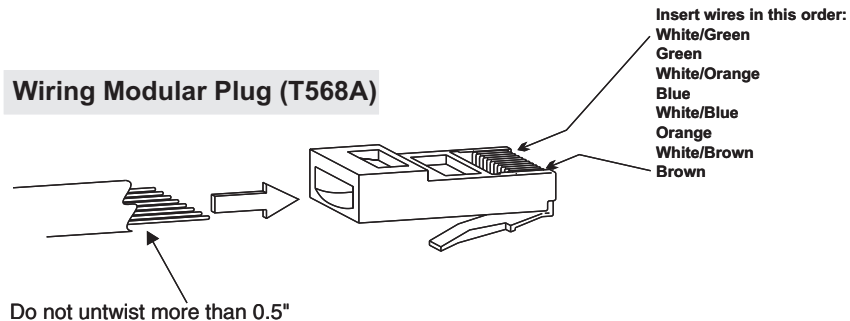
Structured wiring basics:

CAT 5 wiring techniques

Wiring a Cat-5 jack



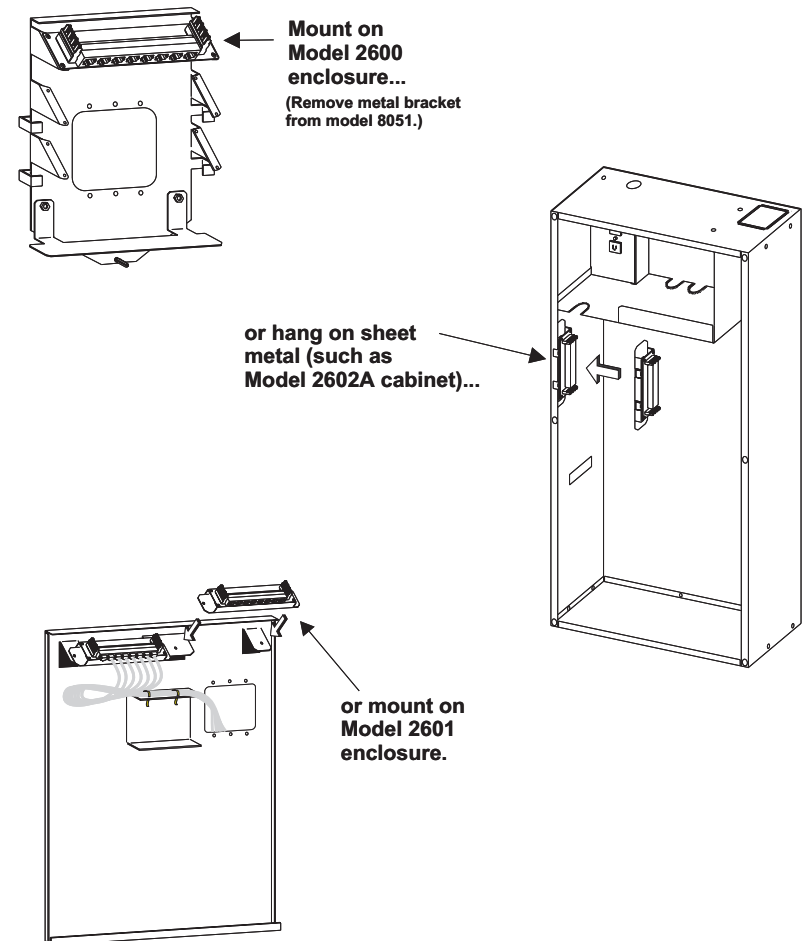
Wiring Modular Plug (T568A)



Structured wiring basics:

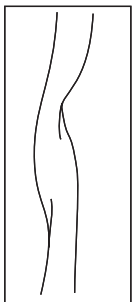
Alternative Ways to Mount the 8050 series hubs.

To protect the wiring, the 8050 series hubs should be in a network enclosure. ChannelPlus enclosures allow you to integrate telephone, data, and coax distribution into one convenient location.

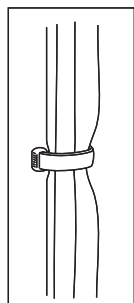


Structured wiring basics:

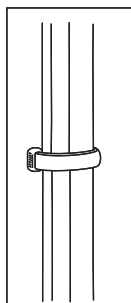
CAT 5 Do's and Don'ts



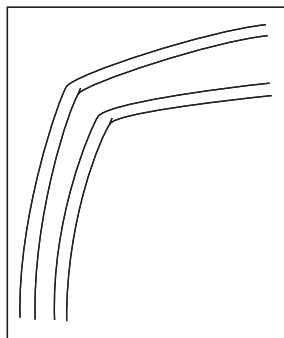
**Do not allow cable to kink or knot.
Also, do not pull the cable with
excessive force.**



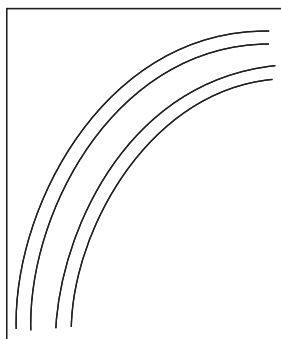
**When using tie-wraps
to secure cable, do not
clinch cables to where
crush-stress is visible.**



Bundle the cables loosely.



**Do not allow cables
to form right angles or
sharp bends.**



**Use sweeping bends with
a minimum radius of 2".**

Channel Plus
Integrated Home Networks

Specifications:

dimensions W x H x D:

8051	6.75" x 1.2" x 1.7" (17.1 cm x 3.1 cm x 4.3 cm)
8052/8053	6.75" x 1.2" x 2.2" (17.1 cm x 3.1 cm x 5.5 cm)

shipping weight:

1 lb
(0.45 kg)

Warranty

Multiplex Technology, Inc. warrants this products to be free from defects in materials and workmanship for a period of one year from the date of purchase or MTI will repair, or at its option, replace the defective product. To obtain warranty service, call MTI for a return material authorization (RMA) number and return the product prepaid to Multiplex Technology, Inc., 3001 Enterprise Street, Brea, CA 92821, Attention: Customer Service. Please put the RMA number on the outside of the carton.

Any implied warranty arising from the sale of the product including implied warranties of merchantability and fitness for purpose are limited to the warranty stated above. MTI shall not be responsible for losses or damages or expenses, whether direct, consequential or incidental arising from the use of or the inability to use this product. Some states do not allow limitations on how long the implied warranty lasts or the exclusion or limitation or incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state.

